

## Case 3195

### *Polonograptus Tsegelnjuk, 1976 (Graptolithina): proposed designation of *P. podoliensis* Přibyl, 1983 as the type species*

J.F.V. Riva

Quebec Geoscience Centre, University of Quebec, C.P. 7500, Ste-Foy,  
QC G1V 4C7, Canada (e-mail: jriva@X1.nrcan.gc.ca)

T.N. Koren'

VSEGEI, Srednij Prospect 74, 199026 St Petersburg, Russia

R.B. Rickards

Department of Earth Sciences, Downing Street, University of Cambridge,  
Cambridge CB2 3EQ, U.K.

**Abstract.** The purpose of this application is to conserve the current usage of the generic name *Polonograptus* Tsegelnjuk, 1976 for an Upper Ludlow monograptid. Přibyl (1983) considered the originally designated type species, *Monograptus butovicensis* Bouček, 1936, to be composite; he restricted the nominal species *M. butovicensis* to its type material and established *Polonograptus podoliensis* for strongly curved specimens of Upper Ludlow age which he had previously included in *M. butovicensis*. Urbanek & Teller (1997) suggested that *P. podoliensis* should be designated as the type species of *Polonograptus*, and this action is now proposed.

**Keywords.** Nomenclature; taxonomy; Graptolithina; *Polonograptus*; *Polonograptus podoliensis*; Silurian.

1. Bouček (1936, pl. I, figs. 6, 7) established the species *Monograptus butovicensis* on the basis of two distal fragments of a *Monograptus* characterized by a gentle ventral curvature (faiblement ventralment courbés) and long, narrow, overlapping thecae, slightly inclined to their axis. No proximal end was known. The type material was from the Lower Ludlow at Butovice, Bohemia, Czech Republic.

2. Jaeger (1975) identified and figured as *M. butovicensis* two short but strongly ventrally curved monograptids with a complete, thin proximal end. One of the specimens was from the Upper *Cardiola* Beds at Cellon, Carnia, Austria, and the other from the uppermost Ludlow Kopanina beds near Konjeprusy, Bohemia, Czech Republic.

3. Tsegelnjuk (1976, pp. 124–125) established the nominal genus *Polonograptus* for early Ludlow monograptids characterized by ‘a long rhabdosome, ventrally curved proximally, arching in the middle and almost straight distally; thecae consisting of smooth, thin, long tubules separated by long interthecal septa, with straight *Pristiograptus*-like apertural margins’. He designated *M. butovicensis* as the type species, and included in *Polonograptus* a new species *P. licis* based on four middle and

distal fragments, but no proximal ends. He included the genus in the family CUCULLOGRAPTIIDAE Urbanek, 1958.

4. Přibyl (1981, p. 373), unaware of the existence of the genus *Polonograptus*, proposed the genus *Alexandrograptus* with *M. butovicensis* as the type species. He refigured one of Bouček's original fragments of *M. butovicensis* and the strongly curved specimen from the Kopanina beds, which had been previously figured by Jaeger (1975). The distal end of the Kopanina specimen is only slightly larger than that of *Polonograptus*, suggesting that it could be equivalent to the proximal end missing in the types of *M. butovicensis*. Becoming aware when the manuscript was in press of the prior existence of *Polonograptus*, Přibyl, in a footnote, referred to *Alexandrograptus* as 'an invalid genus'. This disclaimer of *Alexandrograptus* in the original publication means that it is not an available name (Article 11.5 of the Code).

5. Two years later Přibyl restricted *Polonograptus butovicensis* to its type material and (1983, p. 158) proposed the species *Polonograptus podoliensis* for the strongly curved and complete specimens from Cellon, Carnia, Austria, and Kopanina, Bohemia, Czech Republic which he had previously (1981) included in *P. butovicensis*. He also pointed out that *P. butovicensis* was from the *Neodiversograptus nilssoni* Biozone of the Lower Ludlow, whereas *P. podoliensis* was from the *Neocucullograptus inexpectatus* Biozone of the Upper Ludlow. He excluded *P. licis* from *Polonograptus* because of thecal dissimilarity and much smaller rhabdosome width.

6. Rickards, Davidson & Banks (1993) established the subspecies *Polonograptus podoliensis australis* for ventrally curved and gradually widening monograptids from the *kozlowskii* Biozone of the uppermost Ludlow of Tasmania, Australia. This species has the simple, slightly curved, overlapping thecae of *P. podoliensis*, but a more gradually widening rhabdosome never reaching the width of *P. podoliensis*.

7. Štorch (1995) emended the diagnosis of *Polonograptus* by adding 'the other typical species of the genus' such as *Polonograptus egregius* (Urbanek, 1970) and *Polonograptus podoliensis* Přibyl. He differentiated *Polonograptus* from its predecessors, such as *Bohemograptus* and *Neolobograptus*, by the prominent elongation of the thecae beginning at the level of th 2 and the 'sequence of the thecal distances'. He also noted that the thecal apertures of *P. podoliensis* had 'paired thecal elevations', which are absent in the type material of *P. butovicensis*. Finally, the stratigraphic distribution of the *Polonograptus* species in the Kopanina Formation of Bohemia led him to postulate that *P. egregius* is the probable ancestor of *P. podoliensis* and *P. podoliensis australis* an intermediate linkage.

8. Urbanek & Teller (1997, p. 43) concluded that the species *Monograptus butovicensis* is a nomen dubium because its type specimens are best interpreted as distal fragments of *Colonograptus roemeri* (Barrande, 1850), a species common in faunal associations at Butovice, and one of the monograptids characterized by an extensive distal thecal overlap. They suggested that the species *Polonograptus podoliensis* be designated as the type species of *Polonograptus* because it is the first reliably defined and described full representative of the genus.

9. The name *Monograptus butovicensis* is based on type specimens which cannot be recognized because they lack the proximal end. No additional material is known from the type locality of *M. butovicensis* that could be of help in understanding the species, leaving us no alternative but to consider it a nomen dubium. The present diagnosis

of *Polonograptus* is based on a hypothetical and composite type species consisting of the proximal end of *P. podoliensis* and the distal end of *M. butovicensis*. The continued acceptance of *M. butovicensis* as type species of *Polonograptus* threatens the current usage of the genus. It is, therefore, desirable to set aside the nominal species *Monograptus butovicensis* as type species of *Polonograptus* and to designate the nominal species *Polonograptus podoliensis* as the type.

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Polonograptus* Tsegelnjuk, 1976 and to designate *Polonograptus podoliensis* Přibyl, 1983, as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Polonograptus* Tsegelnjuk, 1976 (gender: masculine), type species by designation in (1) above *Polonograptus podoliensis* Přibyl, 1983;
- (3) to place on the Official List of Specific Names in Zoology the name *podoliensis* Přibyl, 1983, as published in the binomen *Polonograptus podoliensis* (specific name of the type species of *Polonograptus* Tsegelnjuk, 1976);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Alexandrograptus* Přibyl, 1981 (unavailable because disclaimed by its author in the original publication).

## References

- Bouček, B.** 1936. La faune graptolitique du Ludlowien inférieur de la Bohème. *Bulletin International de l'Académie des Sciences de Bohème*, **46**: 1–17.
- Jaeger, H.** 1975. Die Graptolithenführung im Silur/Devon des Cellon-Profil (Karnischen Alpen). *Carinthia II*, **85**(165): 111–126.
- Přibyl, A.** 1981. New graptolites of the family Monograptidae from the Upper Silurian of Bohemia. *Věstník Ustředního ústavu geologického*, **56**(6): 371–375.
- Přibyl, A.** 1983. Graptolite biozones of the Kopanina and Pídlí Formations in the Upper Silurian of central Bohemia. *Časopis pro mineralogii a geologii*, **28**(2): 49–167.
- Rickards, R.B., Davidson, G.J. & Banks, M.R.** 1993. Silurian (Ludlow) graptolites from Golden Ridge, NE Tasmania. *Memoirs of the Association of the Australasian Palaeontologists*, **15**: 125–135.
- Štorch, P.** 1995. Upper Silurian (Upper Ludlow) graptolites of the *N. inexpectatus* and *N. kozlowskii* biozones from Kosov Quarry near Beroun (Barrandian area, Bohemia). *Věstník Českého geologického ústavu*, **70**(4): 65–89.
- Tsegelnjuk, P.D.** 1976. Pozdnesilurijskie i rannedevonskie monograptidy jugo-zapodnoj Okrainy vostocno-evropejskoj platformy. Pp. 91–133 in Shulga, P.L. (Ed.), *Paleontologiya i stratigrafiya verhnego Dokembriya i nyzhnego Paleozoya jugo-zapada vostocno-evropejskoj platformy*. Naukova Dumka, Kiev.
- Urbanek, A. & Teller, L.** 1997. Graptolites and stratigraphy of the Wenlock and Ludlow Series in the East European Platform. *Palaeontologia Polonica*, **56**: 23–57.